

# Sixth Annual Report to EPA for the Year 2002

The Chlorine Institute, Inc.  
1300 Wilson Boulevard  
Arlington, VA 22209

Presented at the May 14 -15, 2003  
BTS Mercury Workgroup Meeting  
Windsor, Ontario

# Chlorine Institute Commitment

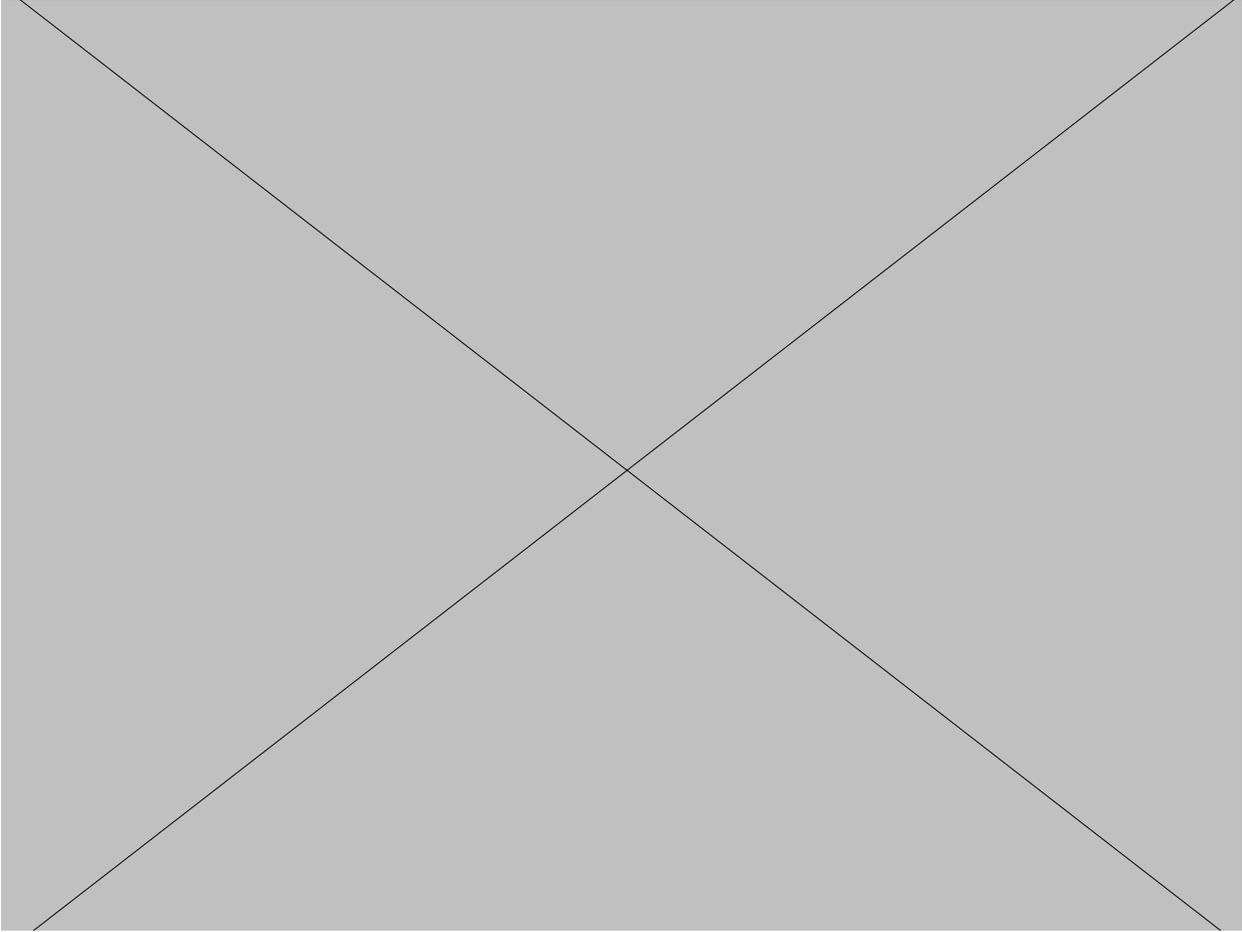
- Reduce Mercury Use by the USA Mercury Cell Chlor-alkali Industry by 50% from the 1990 - 1995 Base Period
- Report Annually on the Progress in Reaching the Goal and on Technical Activities to Reduce Mercury Uses and Emissions

## 2002 Highlights

- Mercury Use in 2002 Increased by 0.9%
- Reduction to Date is 81%
- After Adjusting for Shutdown Facilities
  - Mercury Use in 2002 Increased by 6.9%
  - Reduction to Date is 74%

## 2002 Highlights (continued)

- ❑ Mercury Purchases Increased Significantly in 2002 (by 95 tons to 130 tons)
- ❑ Cell Room Technology Enhancements Underway at Several Facilities
- ❑ Four Facilities Require an Increase in Mercury Process Inventory to Accomplish



# Goals of Cell Room Technology Enhancements

- ❑ Improve Cell Room Equipment Performance and Reliability
- ❑ Facilitate Compliance with Chlor-Alkali Mercury MACT
- ❑ Reduce Power Consumption
- ❑ Reduce Mercury Emissions and Use Consistent with Industry's Commitment to the BTS and to Responsible Care®

# Typical Cell Room Enhancements

(Note - Varies by Specific Site)

- Install Newer Technology Mercury Pumps and Hydrogen Coolers to Reduce Fugitive Emissions
- Enlarge Decomposers to Improve Decomposition of Mercury Amalgam Formed in the Primary Cell

# Typical Cell Room Enhancements

(Note - Varies by Specific Site) (cont'd.)

- ❑ Modify Electrical Distribution System Including Control and Monitoring Systems
- ❑ Multi Year Implementation Required
- ❑ The Presentation that Follows will Give More Details of These Enhancements at One Facility

## Estimated Increases in Process Mercury Inventories

<u>Year</u>	<u>Increase (in tons)</u>
2002	100
2003	80
2004	50
2005	15

## 2002 Activity Highlights

- ❑ Conducted a Workshop on Sulfide Technology and How it Can Be Enhanced
- ❑ Conducted a Workshop Addressing Mercury Issues at the Institute's 2002 Annual Meeting
- ❑ Analysis of Proposed MACT

## 2002 Activity Highlights (cont'd)

- Submitted the Fifth Annual Report to EPA
- Commenced Work on One New and One Updated Technical Publication
  - Guidelines for the Optimization of Mercury Treatment Systems
  - Mercury Medical Surveillance and Hygiene Monitor Practices